

## PROJECT OVERSIGHT REPORT

Service, Knowledge, and Information Exchange  
System (SKIES)  
Employment Security Department (ESD)

Report as of Date:  
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**Description:** WorkSource Washington, this state's brand name for the One-Stop Career Center, is a federally-sponsored, national initiative to change the way employment-related services are provided to job seekers and employers. Previously, job seekers and employers found services by traveling to several different agencies at different locations. With the implementation of WorkSource, customers are able to receive the services they need from a single career development center, convenient affiliate sites, or self-service sites throughout the state. This new system is based upon four core principles: universal access, customer choice/focus, integrated services, and accountability.

**Technology:** The WorkSource One-Stop Operating System (OSOS), which has been renamed SKIES, will be a transfer system based upon Utah's UWORKS version of OSOS. The SKIES architecture contains three tiers: an Oracle database server, an applications server, and client software that employs web browser software (Netscape Navigator or Microsoft Internet Explorer). The system will be built and maintained using the Oracle Development tool set. The Oracle Application Server resides on an IBM RS/6000 hardware platform running the AIX UNIX operating system.

**Life Cycle Stage:** Conversion and Testing

**Budget:** The total federal implementation One-Stop grant that ended in 2000 was \$9.45 million, which included approximately \$3 million for information technology. The budget for the first two years included an allocation of \$275,000 to the WorkSource Information Technology Workgroup. These funds were used to perform a connectivity study and a feasibility study of the Customer Tracking and Accountability System, which evolved into SKIES. The third year budget included an allocation of \$1.9 million for acquisition of SKIES. On April 12, 2000, the Executive Policy Council approved the full expenditure of the \$1.9 million by June 30, 2000 to acquire the OSOS system and associated database software. An additional \$1.78 million will be provided from federal employment security funds for the implementation and operation of the system. As of the end of December 2001, a total of \$3,745,565 had been expended for SKIES. Although not charged against the project, \$1.5 million has been expended for Oracle software.

**Schedule:** The SKIES implementation plan includes these milestones:

- |   |                          |
|---|--------------------------|
| • Adopt UWORKS system                   | March 2000/Complete      |
| • Evaluate the Alpha SKIES application  | November 2000/Complete   |
| • System ready for system test          | June 2001/Complete       |
| • Conduct User Acceptance Testing (UAT) | September 2001/Complete  |
| • Conduct Pilot                         | February 2002/ (Revised) |
| • Begin SKIES statewide implementation  | March 2002/ (Revised)    |

**Status:** Since the last report, the SKIES project completed System Test and resolved all outstanding incidents. However, Pilot and Implementation were delayed due to issues related to Stress Testing and Data Conversion. Working with the application vendor, Oracle, and the hardware vendor, IBM, ESD has identified and reconciled all application and platform related

performance issues. During the week of January 7, 2002 ESD staff successfully simulated the target workload of 800 concurrent users. Based on the analysis of the tool, the three application servers have a capacity of at least 1000 concurrent users. The one remaining task is to simulate a workload of 500 concurrent users through the DIS Fortress security firewall. This workload is more than twice the projected volume. This test will simulate SKIES application access by partners who are not attached to the intergovernmental network. Stress testing is a critical part of the risk mitigation plan for statewide implementation. Although it has contributed to delays in the project, the stress testing and resulting performance improvements are essential to ensuring that the system provides acceptable performance on the day of Implementation so that WorkSource partners can satisfy their business needs.

Data conversion has been delayed due to issues concerning business rules and the need to validate converted data. One of the complexities of SKIES is that it replaces two legacy systems: JobNet data exchange and DataFlex. Since DataFlex is used for Workforce Investment Act reporting, it is critical that SKIES capture the correct data in the proper format. Concerns arise when data from the two systems populate the same data fields. This requires the development of complex business rules and resulting programming. ESD developed and programmed the necessary rules that have been documented through a transformation document. After the data was converted, ESD did an extensive data validation that used a sample record size that was sufficient to generate a high level of confidence. As a result of the validation effort, ESD discovered a critical incident that required additional programming since it involved the creation and tracking of history for a critical federal program. ESD now expects to complete the reprogramming and data conversion testing by February 3, 2002.

To allow time for data conversion and the development and test of implementation plans, the project steering committee (Executive Oversight Committee) established the period of February 11-22, 2002 for the SKIES Pilot. Implementation will be scheduled during the month of March 2002. An exact date will be established based on the results of data conversion and early Pilot results.

**Recommendations:** DIS recommends that ESD continue to proactively manage data conversion to quickly identify and resolve issues. ESD also needs to develop implementation plans and execute tabletop exercises to refine them.